



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

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REPLY TO THE ATTENTION OF:

May 5, 1997

SR-6J

Scott Cornelius

Michigan Department of Environmental Quality, Superfund Section
P.O. Box 30426
Lansing, Michigan 48909

Dear Mr. Cornelius:

I have reviewed the final Proposed Plan for the remedy selection at the 12th Street Landfill Operable Unit. Attached are a list of comments on the revisions to the draft Proposed Plan, along with comments that I previously made, which were not addressed in the revision. In addition, if the site capping involves filling within a floodplain/floodway, then regulations governing such actions should be looked into (see my comments on the draft Bryant Mill Pond ROD).

If you have any questions or comments, feel free to contact me at (312) 886-4740.

Sincerely yours,

A handwritten signature in cursive script that reads "Richard E. Boice".

Richard E. Boice
Remedial Project Manager

**COMMENTS ON DRAFT PROPOSED PLAN
AND SOME SUPPORTING DOCUMENTS
BY RICHARD BOICE**

INTRODUCTION:

Par. 2: U.S. EPA personnel and organizations outside of Region V are also providing support to MDEQ for completion of the RI/FS. Region V is a Regional Office not a division of U.S. EPA.

Par. 3: I have not yet received the Focused Feasibility Study. I suggest that you define the portions of the Risk Assessment report for the King Highway Landfill that are applicable to the 12th Street Landfill. For example, was PCDD/PCDF detected at the 12th Street Landfill as they were at the King Highway Landfill? The King Highway Risk Assessment identifies a number of parameters exceeding Type B drinking water standards, but these were not identified for the 12th Street Landfill. Is dike failure a potential concern at 12th Street Landfill as it is at King Highway Landfill?

I suggest that a memorandum be prepared updating the risk estimates conducted at the King Highway Landfill for the 12th Street Landfill since the RME appears to be considerably higher at the 12th Street Landfill.

I suggest that a memorandum be prepared assessing the risks from ingestion of fish to the Angler.

The "Draft Risk Assessment King Highway Landfill" contains an incorrect statement regarding the future ecological impacts from the PCB contamination in the wetlands and river sediments, and includes a misleading statement that "Ecological effects of PCB at the KHL-OU are not apparent." (p. 18). It contains very little information on ecological impacts including no quantified risk estimates. It also seems to minimize the value of the affected wetlands and habitat. On the other hand, the Kalamazoo River Ecological Risk Assessment contains a wealth of information on ecological impacts including quantitative benchmarks for ecological risks. This report makes it clear that ecological risks are substantial, and documents those risk clearly, including actual measurements of PCBs in fish and wildlife, and modeling to demonstrate that the observed levels of PCB contamination can be attributed to the sediment and soil contamination. Although the human health risks are documented, they depend on hypothetical exposure scenarios, and the estimated risks from the RME are within the "acceptable risk range". As a result, the human health risks may not be convincing in justifying the remedial action, if it is challenged in Court. Therefore, I suggest that the Kalamazoo River Ecological Risk Assessment be incorporated into the Administrative Record for this Site and be referenced in the Proposed Plan.

Site History

Information on how contaminated paper residual came to be located in the wetlands and river should be included.

RI/FFS Background

It should be explained that: MDEQ is providing oversight of implementation of the RI/FFS with support from U.S. EPA; and that MDEQ (in consultation with U.S. EPA) has approval authority for the RI/FFS.

Investigation Findings

How stable is the landfill itself and its surrounding berm? What affect would removing the Plainwell Dam (which I understand is likely to occur in the future) have on the stability of the landfill.

How much of the waste is under the water table? What affect would removal of the Plainwell Dam, which is being considered, have on the water table, and on the quantity of waste below the water table?

Evaluation of Site Risks

Based on the concentration range reported in the RI Report, it appears likely that the RME PCB concentration is significantly higher at the 12th Street Landfill. It is advised that a memorandum be prepared to report the actual RMEs and risk estimates for the 12th Street Landfill.

Par. 2: I read the "Draft Risk Assessment King Highway Landfill" (May 1994) but observed no discussion of which exposure pathway the remedial action should address. The conclusion regarding which exposure pathways need to be addressed at the 12th Street Landfill needs to be adequately supported. The Proposed Plan notes that release of residuals to the Kalamazoo River is an exposure path way to be addressed. However, the mechanism for this release needs to be identified as: 1. continued release of PCBs to the river sediments via erosion from the landfill; 2. catastrophic release of landfill contents due to failure of the berm (or some other mechanism); and/or 3. migration of PCBs through the ground water. The need to reduce exposure to humans and to ecological receptors should be noted.

Par. 3: Although there apparently are similarities between the 12th Street Landfill and the King Highway Landfill, there also may be significant differences. For example, is there

reason for concern about the possibility of catastrophic failure of the berm at the 12th Street Landfill as there is at the King Highway Landfill? Are the PCB concentrations really similar? Are there similar percentages of wastes below the water table? Is there also concern about a dam removal at the King Highway Landfill? In addition, as summarized below, there are a number of inadequacies in the King Highway Risk Assessment. Therefore, it appears to me that simply referencing the King Highway Risk Assessment does not adequately address all the conditions at the 12th Street Landfill. I suggest preparation of a memorandum addressing the unique conditions at the 12th Street Landfill, correcting inadequacies in the King Highway Risk Assessment, and providing a summary of the actual risk estimates at the 12th Street Landfill.

Comparison of Risks and Remediation Goals

The second sentence in this Section is inconsistent with the description of the remediation goals in the previous Section since it does not address releases to the Kalamazoo River.

This Section should identify the receptors and the risks to these receptors that were determined to be unacceptable as a result of the risk assessment. This Section should identify the criteria that will be used for the wetland soil and sediment cleanup, including a PCB concentration that needs to be met in the cleanup verification sampling. Is a goal of the action to stabilize the landfill to prevent catastrophic failure? Is a goal of the action to prevent erosion from the landfill? Is a purpose of the action to reduce or minimize infiltration of precipitation through the landfilled waste? Is ground water migration a concern?

Presumptive Remedy Approach

This Section should not announce MDEQ's preferred alternative since this is the function of a later Section. Furthermore, from the way it is written, it appears that MDEQ had already decided on its preferred remedy before the evaluation was completed.

Alternative 2: Landfill Closure

It should be noted in this Section that as part of the ROD approval, the U.S. EPA Regional Administrator will need to approve a waiver, pursuant to 761.75(c)(4), of some TSCA chemical waste landfill requirements, which apply to excavated wetland soils and sediments that exceed 50 ppm of PCBs. This waiver will allow consolidation of this soil and sediment with the rest of the contaminated paper residuals onto the landfill and then covering and containing them under the final landfill cover. To approve this waiver the Regional Administrator must determine that the final remedial action will be protective, and that no significant reduction in risks would be gained by off-site disposal of the small quantity of consolidated soils and sediments that exceed 50 ppm of PCBs compared to containing these residuals under the final cover along with the bulk of the PCB contaminated residuals.

Will the planned eventual removal of the Plainwell Dam result in lowering of the water table, potentially accompanied by subsidence of the soils under the landfill, which would affect the site cover?

How would contaminated wetland soils and sediments be dewatered?

It may be desirable to proposed the composition and thickness of the flexible membrane liner.

It is misleading to characterize the flexible membrane liner as "impermeable" since water can flow through the liner through holes in the liner, which always occur to some extent during installation.

What procedures would be used to dewater the contaminated wetland soils and sediments that are to be consolidated on the landfill?

In the last sentence of the Section, the word "potential" should be removed.

On page 7, change "reconsolidation" to "consolidation".

Overall Protection of Human Health and the Environment

Par. 2: The migration pathways and exposure routes that would be eliminated or controlled by Alternative 2, should be identified.

State Acceptance

The State does not "approve" the remedy.

DRAFT RISK ASSESSMENT KING HIGHWAY LANDFILL

1. The RME for surface soils/residuals/sediments for exposure to on-site workers for King Highway Landfill is 1.9 mg/kg; for exposures to trespassers was 8 mg/kg; and for exposure to Anglers was 42 mg/kg. All of these RMEs appear to be much less than the appropriate RME would be for the 12th Street Landfill, where concentrations range as high as 158 mg/kg. Based on this, the estimated risks at the 12th Street Landfill are expected to be considerably higher than the estimated risks at the King Highway Landfill. A memorandum should be prepared providing site specific risk estimates for the 12th Street Landfill based on the RMEs appropriate for this Site.
2. The risk from exposures of Anglers to PCBs due to ingestion of fish should be included in the risk estimate. Since this is a base-line risk assessment, the assessment should assume exposures disregarding any government fishing restrictions or warnings.

3. The statement in Section 3.6 that "No future impacts on ecological components are expected to occur if baseline conditions at the OU are maintained and the dike containment system is not compromised." ignores the ongoing exposures of wildlife to PCBs in the wetlands and river sediments.